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FOOD HELP FOR MOTHERS AND CHILDREN



WIC in Arizona: Food help for Mothers and Children

By Ralph E. Vincent

WOMEN AND YOUNG children in 14 areas in Arizona are receiving special foods to supplement their diets. They are participants in the new Special Supplemental Food Program for Women, Infants, and Children (WIC), which will operate in 253 project areas throughout the country.

Staff at all 253 project areas will collect basic medical data to help measure the effectiveness of the program, but in 19 areas there will be a detailed medical evaluation conducted under the direction of the University of North Carolina, School of Public Health. Two of the areas in Arizona will participate in the detailed evaluation.

"The WIC program is a 'first' in that it combines medical and nutritional evaluations with a specific supply of nutritious foods," says Anita Yanochik, who heads up the operation of WIC in Arizona. "This will enable us to determine the health benefits of such a program."





Brothers and sisters look on as staff at the Coconino County WIC project take blood samples from participating children. The nutrition aides periodically check the height, weight, and head circumference of children and infants, and the height and weight of expectant and nursing mothers. Coconino is one of two project areas in Arizona taking part in the detailed evaluation of the WIC program. All 14 project areas in the State issue vouchers to WIC participants.

Chief of the Bureau of Nutrition of the Arizona Department of Health Services, Ms. Yanochik has been working with health care services in Arizona for the past 7 years. She is currently active in innovative work in monitoring children in early detection of high cholesterol and cardiovascular disease.

Ms. Yanochik explains that selection of the project areas in Arizona was made by USDA's Food and Nutrition Service on the basis of information contained in applications submitted by local health agencies. Twelve of the selected sites began operating in January, and the remaining two opened in March and May.

The detailed medical evaluation will involve approximately 300 women, infants, and children in Coconino County and 1,350 in Pima County.

"We were ready for the WIC program," Ms. Yanochik says. "We've always had the medical component in our health care delivery system. We were doing screening, referral, monitoring, and aide training, but we didn't have a food component. Now the clients get supplemental foods in addition to medical services."

WIC project areas can use a variety of ways to provide supplemental foods to participants. They can distribute the food at health clinics, issue food vouchers redeemable at authorized retail stores for specified items, or use variations of these two basic systems.

Arizona developed a voucher system with the cooperation of the banking industry and the Retail Grocers Association of Arizona, which was also helpful in initiating the food stamp program.

"We went to the grocers' association, and said: 'Here are the regulations for the new WIC program, help.' They were in on the ground floor in



planning, and we developed the voucher system together," Anita Yanochik explains.

Foods authorized by the Food and Nutrition Service for use in the program are:

☆ For infants: Iron-fortified infant formula, iron-fortified cereal, and fruit juice which is high in vitamin C. After age 6 months, participating infants may receive whole or evaporated milk, or both.

☆ For children, pregnant women and nursing mothers: Milk which is high in vitamins A and D, including whole, skim, low-fat, evaporated, or non-fat dry milk; cheese, as a substitute for milk; eggs; iron-fortified cereal; and fruit or vegetable juice which is high in vitamin C.

Expectant or nursing mothers, infants, and children under 4 years old can participate in WIC, if they: live in an approved project area; are qualified to receive free or reduced cost medical treatment from the participating health agency or clinic; and are determined by competent professional personnel of the local agency to be in need of supplemental food assistance.

The WIC program is designed to help those people who are considered "nutritional risks." This would include, for example, pregnant or lactating women with known inadequate nutritional patterns, high incidence of anemia, high rates of prematurity or miscarriage, or inadequate patterns of growth—being obese or underweight. Infants and children with deficient patterns of growth, high incidence of nutritional anemia, or known inadequate nutritional patterns would also be considered "nutritional risks."

Martha Tosti, Chief of the Bureau of Nutrition of the Maricopa County Health Department, says that the WIC program has been well received in the county.

"Our workers have done a monumental job in getting so many eligible clients enrolled in the program," she explains.

At the project areas in Coconino and Pima Counties the detailed medical evaluation is now underway. The staff collects household information and clinical data from all participants during their initial visit. This

includes the height and weight of mothers, and height, weight and head circumference of infants and children. They also take a sample of blood from each participant for hemoglobin and hematocrit determinations, and for storage and subsequent shipment to the University of North Carolina for evaluation. Dietary data is collected from half of the participating women and one fourth of the infants and children.

The staff at the clinics repeat these procedures at periodic intervals while the mothers, infants and children are getting supplemental foods.

Anita Yanochik explains that the nutrition aides are trained to collect the information necessary for the medical evaluation.

"But what's most important," she says, "is that they're indigenous to the community, and that they have a feeling for people. We can train them to do the specific work."

Faye Wong, the nutritionist who directs the WIC program in Coconino County, adds that the aides do all of the interviewing. They also issue vouchers, process blood, read results, and provide nutrition counseling to the patients.

"When you're working with families," Ms. Yanochik points out, "it's important to assess the total family environment so that you can be sure just what the problems are and what kind of therapy is needed."

"After we screen a family," she continues, "the nutritionist works up a plan with the aide. If we determine that a child is anemic, or obese, or diabetic, for example, the aides go into the home with a specific plan for that problem."

"If you want behavioral changes, you really have to do complete and consistent followup," she concludes.

Ms. Yanochik and the local health agencies she works with are helping low income families understand the important relationship between nutrition and health.

According to Dr. William J. Thomas, director of the Coconino County Health Department, nutrition is an integral part of the public health system. "We hope that the WIC program will provide conclusions that will help us in operating similar programs," he says. ☆

LUNCH RECIPES GET 'KID-TESTED'

By Herb Strum

USDA's CURRENT recipe-testing study recently completed a 3-month session in New Jersey. The project was widely acclaimed by the main participants—classes of fifth and sixth-graders from schools in the Hamilton Township area.

"I never knew I liked split peas this way," said a 12-year-old recipe tester after finishing her portion of beef-rice-split pea casserole.

Having children test new menu ideas represented an innovative departure in the manner of testing recipes by USDA's Food and Nutrition Service and Agricultural Research Service. The object of the joint venture was to determine the acceptability of several USDA-tested main dish recipes in schools selected from each of the five regions throughout the country.

In New Jersey, four elementary schools—Yardville Heights, Morgan, Greenwood and Klockner—were selected for the project in Hamilton Township, a school district near the State capital of Trenton.

Monitors for this project in these four schools were Hamilton Township school lunch director Agnes Shaddow and FNS home economist Joan Ruesser from the Northeast Regional Nutrition and Technical Services Staff. They monitored and observed all stages of the project, including recipe preparation by the cafeteria staffs. In addition, they distributed and gathered acceptability scorecards from the children after the youngsters had eaten and evaluated their recipe for the day.

The combined efforts of FNS and ARS went into the early planning of the project. They selected the recipes, located the schools and defined guidelines to be followed. The result was an orderly series of 24 tests—12 recipes, each tested twice—over a 3-month period.

In the initial phase of the testing,



Dr. Mary Hill and Meredith Robinson of the Agricultural Research Service visited each participating school to provide some preliminary instructions to principals, teachers, monitors and cafeteria staffs.

On the first day of testing in each school, the ARS representatives worked with the monitors on the procedures involved in gathering data with the least disruption to the school program.

FNS and ARS personnel attended the first testing day at each school. After that, the school district took over the operation.

Monitor Joan Ruesser explained that written comments from the scorecards will determine acceptabil-

ity of the foods. However, she said, on-the-spot comments of the 10-to-12-year olds were also revealing and amusing. She quickly learned that youngsters have more sophistication in matters of taste than adults realize.

"Their ability to detect new or different spices or condiments and combinations of foods was uncanny," she commented.

Also noteworthy, Ms. Ruesser pointed out, was their ability to ferret out pepper or chile powder in the recipe and to loudly acclaim, at the other end of the spectrum, that the food was plain or flat and in need of "something."

"And they could tell whether or not an ingredient was fully cooked or in need of more stove time," she added.

After a few rounds of collecting the data, the USDA staff realized that "kid-testing" recipes was not something that is performed in a perfunctory manner, but bears close watching. And as the youngsters tastes went, so went their acceptance (or non-acceptance) of the dozen recipes submitted for the project.

Included in the recipes tested and standardized by the Agricultural Research Service were: Baked Beans, Cheese-Rice Casserole, Liver Creole, Beef-Rice-Split Pea Casserole, Tamale Pie, Chicken and Noodles, Savory Pork, Pork and Sauerkraut, Bean Tacos, Beef-Macaroni-Tomato Casserole, Peanut Butter Meat Balls, and Lasagna.

Cafeteria personnel in each of the four schools responded enthusiastically, and their enthusiasm picked up with each test. Cafeteria managers soon learned the recipe testing was beneficial to them as well as the students.

At the Yardville Heights School, cafeteria manager Ruth Weber said the project brought innovative suggestions to her daily meal preparation.

"I am always running out of ideas, and this has put new life in our kitchen," she explained. "Not only do our kids have big appetites, but our need for more and more recipes is almost inexhaustible."

Klockner school manager Severine Mangus said she enjoyed the challenge of working with new and untried recipes and delighted in the acceptance of her "kitchen chemistry" by the students.

"I feed these kids and treat them just as if they were my own," she added. "I like my work and I think the children know it because they enjoy my cooking. I buy fresh food and serve it to them just the way it is supposed to be served."

Greenwood School Principal Vincent Vacarro showed up with the students to take part in the testing.

According to cafeteria manager Colette Gulli, the principal is a frequent visitor to the school kitchen. "He has been coming down ever since we started our testing," she said. "The kids like to have him around."

Vacarro and teachers at the school have high opinions of both Ms. Gulli and the recipe testing project.

"I like just about everything Ms. Gulli serves," the principal said.

Fifth grade teacher Ronald Deluca applauded the testing: "The recipe ideas are a welcome change in the cafeteria pattern."

Each child involved in the project became a fashioner of future meals for the school lunch set. They expressed appreciation of the fact that grownups were recording their opinions and suggestions.

Information gathered in the project will be used to determine whether these recipes will be used in the ongoing revisions of USDA's publication, "Quantity Recipes for Type A School Lunches." ☆

School Lunch Gets a Spanish Setting

THE MOTIF IS Spanish. Bright wall colors accent the archways featured throughout the dining area. Diners choose from tables or booths—or can select seating on a small balcony overlooking the main eating area.

This description of the Ben Lomond High School cafeteria in Ogden, Utah, may explain the main reason for a sharp increase in school lunch participation there last year when the cafeteria was transformed into a unique eating place for students.

The tastefully decorated cafeteria came about when Superintendent William Garner and the Board of Education began looking at ways to increase student interest in eating at school. When the suggestion of building a new cafeteria was considered too expensive, an architect was called in to decide what could be done with the existing facility.

The dining area was expanded to include two hallways and an unused classroom. Archways were made from unneeded doorways, forming the Spanish motif, and a balcony

was developed. Bright colors and carpeting added the finishing touches.

An especially desirable feature in the new cafeteria arrangement, points out school principal Russell Carruth, is that the overhead doors can partition off the kitchen from the dining area. This enables different groups to use the space for meetings and other activities when students are not eating. Also by closing the sliding doors, cafeteria personnel can continue their work undisturbed.

A number of organizations use the cafeteria. Drama and music groups hold rehearsals there. Local musicians use it for piano recitals and chamber concerts. School officials use the space to give special tests. Not limited entirely to school functions, the cafeteria is used occasionally by a senior citizens group which meets there for dinner, although their food is catered.

In addition to the new decor, food selection was also increased to attract student customers.

They can now choose from a salad bar, sandwich line or regular meal—all meeting Type A lunch standards required by the Food and Nutrition Service.

The addition of the two new serving lines has created no problems in food waste, points out cafeteria

manager Mabel Checketts.

"We prepare fewer sandwiches and salads than we actually think we will need," she says, "but we have the ingredients ready to make additional ones." Even though the wider food selection is probably part of the reason for the increased participation, the regular meal is still the best seller.

What are the results of the refurbishing? Participation increased by more than 100 students per day with the opening of the redesigned facility.

Faculty members, too, are pleased with the transition. One home economics instructor says that several teachers especially like the salad plate, which helps them maintain their weight.

According to Cluff Snow, school lunch director for the Utah Department of Education, the Ben Lomond cafeteria is among the most attractive and unusual in the State.

One of the real compliments came from the student body when the traditional "Scots Week" banquet was held in the cafeteria this year . . . and attendance was the best ever. In previous years, this banquet for Ben Lomond students was held at a local restaurant.

A Ben Lomond high schooler sums it up, "It's really kind of fun to eat in the cafeteria, now."



Communities Learn About School Lunch

"I DIDN'T KNOW THAT."

"Nobody ever told me."

"Where can I find out more about the School Lunch Program?"

Those were some of the more repeated comments heard by representatives of the Food and Nutrition Service and the New Jersey State Department of Education at the Woodbridge Shopping Center, where an estimated 100,000 persons saw a special school lunch display during a week-long exhibit.

The purpose of the exhibit was to bring the National School Lunch Program message to parents who live in the Woodbridge vicinity, an area that has a low percentage of schools

participating in the program.

In addition to the USDA school lunch exhibit, Type A lunch replicas and several publications on the subject were on display for passersby.

Many parents took the opportunity to discuss with USDA and State representatives the basics of the Type A lunch and what it is designed to do. Also, parents were able to find out if their children's schools were participating in the National School Lunch Program and, if not, who they could see to discuss starting a program.

The shopping center project is but one instance of an ongoing nationwide campaign to enlist schools in the National School Lunch Program. The campaign, known as "Outreach," is a combined Federal, State and local effort in the area of child nutrition.

Outreach is a multi-faceted project, requiring active participation by all agencies, organizations and individuals interested in providing nutritional noon meals to the

Nation's children.

In Hyde County, South Dakota, action by teachers concerned with the health of 150 children in one and two-room schools has resulted in balanced lunches each day for the youngsters.

The teachers, who live in the community of Highmore and drive to the nine outlying schools each day, pick up pre-packed lunches at the Highmore School cafeteria and take them to their schools. The lunches are refrigerated at the schools until noon and then heated and served.

Lunches are prepared the previous day and kept under refrigeration until the teachers call for them. Until the arrangement started last fall, the nine schools had no food service.

In California and other States, examples of the results of outreach efforts are abundant. Public school districts in Los Angeles, Oakland, Fullerton, Newark, Santa Cruz and Fontana Counties are providing food service to parochial schools. ☆

Service for Elderly Shoppers



ELDERLY PERSONS living in retirement homes sometimes have difficulty doing their grocery shopping. But thanks to one Dallas grocery chain, that's a worry residents of a local senior citizens home do not have.

These senior citizens live in a high-rise apartment complex. Each apartment has a fully equipped kitchen in which the residents prepare all their meals. So for them grocery shopping is a necessity and not a luxury.

Since December, the grocery chain has chartered a city bus twice a month for residents of this complex. Anywhere from 25 to 40 people take advantage of the free round trip, which is comfortable as well as convenient.

Because more than half of these shoppers use food stamps, the trips are scheduled around the arrival of the stamps. Before the first trip, store officials presented a program at the complex to inform residents how to shop with food stamps. They also discussed tips on bargain buying and good nutrition.

The food stamp program is fairly new to the Dallas area, and store officials wanted to be sure that the residents were fully informed of how the program works.

According to the store manager, the chain store didn't undertake the project to make money. In fact, with \$40 for the bus rental and added personnel expenses, he pointed out, it is necessary for the shoppers to buy \$400 worth of groceries for the store to break even.

Apartment residents wear name tags for purposes of riding the bus and for identification as they shop. Store personnel are eager to

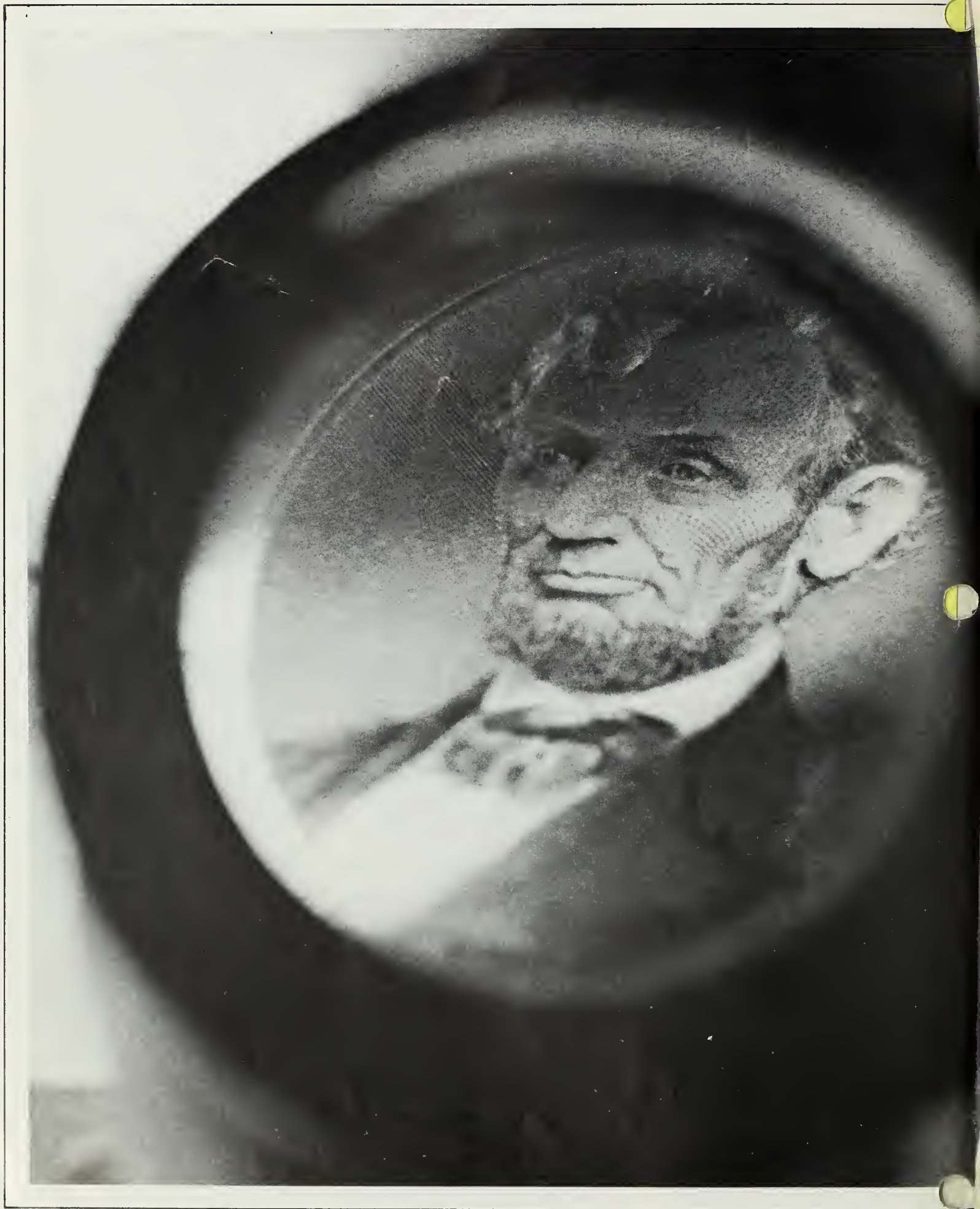
help all these shoppers, and they go out of their way to offer assistance. One blind lady is able to do her shopping only with the help of one of the checkers.

The store manager reports that his staff really looks forward to the visits of the elderly shoppers.

Prior to the chartered bus project, apartment residents had to pay \$1.50 per person to ride in a private car to shop. No matter how many rode in the car, the price was always the same.

Shoppers usually spend about an hour and a half in the store. Store employees load groceries in the bus and then follow it back to the apartment complex where they help residents carry the packages to their apartments.

"I couldn't walk anywhere to get groceries," explained one woman on crutches. "If you don't have a family, there's nobody to take you shopping. I really appreciate this service." ☆





Food Stamp Security Begins With Printing

By Martha Cashion

Concentration and skilled steady hands are necessary tools for the master craftsman who engraves the portrait of Lincoln on the \$5 food coupon (below). The serial numbers on the \$5 coupon are inspected as sheets are collated into booklets at the Bureau of Engraving and Printing (right).



In March 1974, 13.5 million people spent over \$450 million worth of food stamps in grocery stores all over the country.

Because food stamps are like money for needy people to spend at authorized food stores, the Bureau of Engraving and Printing (BEP) takes special precautions against counterfeiting and fraud. Similar to those built into the design and printing of paper money, these precautions include special designs and inks. And because of the volume of stamps needed to meet the demands of the food stamp program, there is also a strict accountability system.

Food stamps were first created at the Bureau of Engraving and Printing when the food stamp program began in the early 1960's. After USDA agreed upon a design for the coupons, the project was turned over to a master engraver.

Why an engraver?

"Engraving is one of the primary keys to security in printing," says Robert Rausch, superintendent of product control at BEP. "The designs are composed of intricately engraved lines. If you look very closely at the design on a food stamp, you will see that everything is composed of minute lines or dots or dashes. The intricacy with which these engraved lines are combined determines the difficulty of reproduction, hence the security of the engraving."

The engraver's task is to translate a picture into lines in a steel plate, or "die." This die, which is then the



master engraving, is used in the printing of such security items as paper money and food stamps. The result of this printing method, which is called "intaglio", is a three-dimensional image.

Run your finger over the surface of a food stamp or a dollar bill. On each you will notice a textured surface caused by ink which is standing out on the paper. No counterfeiter can reproduce money or food stamps or any other intaglio-printed item just by taking a picture of it. He must duplicate the three-dimensional image. And a skillful engraver makes his engravings in such a way that no one can copy them exactly.

Lines are an engraver's medium, and there is no predetermined manner in which to carve them. Beyond the basic techniques of engraving, the way the lines fit together is left up to the engraver. He may use cross hatches, insert dashes, or use any number of methods to achieve tonal qualities, lighting, shading and a sense of depth. This individual creativity is what adds to the difficulty in counterfeiting.

A number of steps are involved in intaglio printing. The master engraving of the product is used to transfer the design a number of times into printing plates. One printing plate of food stamps contains many images that will be printed on one sheet of paper at a time.

When the printing plate is prepared, it is positioned on a press. As the press rolls, the plate is first covered with ink and then wiped clean. However, since the design is actually indented in the metal plate, ink remains in the engraved portion. As the printing plate meets a sheet of paper, enormous pressure is applied, and the paper lifts the ink out of the "wells" of the engravings.

The engraving process played an important role in the expansion of the food stamp program, for as the dollar value of the program increased, the need for security also became greater. When USDA introduced the \$5 coupon, a portrait of Lincoln became part of its design.

"Portraits are one of the most difficult types of engravings to reproduce," explains Robert Rausch. "Because achieving the desired likeness

requires much skill, portraits are extremely difficult to counterfeit."

But complex engravings play just a part in the total security of food stamps. The ink and paper used also have special features to discourage counterfeiting. Formulas for producing the exact color of ink are kept secret. In addition, each sheet of paper used for food stamps is accounted for: the blank paper is counted when it arrives at the production areas, and that figure must agree at each stage of the printing operation. Sheets set aside to be destroyed because of errors or poor quality must also be tabulated.

Once the coupons are serialized, they are kept in order and ultimately distributed by those numbers. If a discrepancy appears, it is corrected at once. This intense security is maintained throughout the entire distribution process.

Providing proper security is probably the most crucial step in the production of food stamps. Getting enough coupons printed to handle the program's needs is next.

The amount of food stamps needed to meet the growth in program participation has increased six-fold since 1969. The fact that most food stamps cannot be reused also increases the need for steady production. Only 50-cent coupons can sometimes be reused, and then, only when given as change in a transaction. Otherwise, all coupons are endorsed by the grocer and deposited in his bank. The bank, in turn, forwards the coupons to the Federal Reserve system, where samples are tested for genuineness. Then all coupons are destroyed.

In March 1972 the production of coupons was averaging 12 million coupons a day. With the forecast calling for continued program growth, the Bureau realized they were not going to be able to handle production of food stamps exclusively. Therefore, they contracted with the American Bank Note Company (ABN) in September 1973 to print and distribute food stamps.

One of the world's largest printers of security items, ABN was well-equipped to handle the demands of the food stamp program. They created special facilities and separate staff for handling production of the

coupons. In addition, they developed an efficient distribution flow and an accurate accounting system for coupon inventory.

ABN welcomed the opportunity to work with the food stamp program. As Charles E. Troy, Assistant General Manager for Manufacturing, puts it, "We feel privileged to be entrusted with this operation and to assist the Bureau in the printing of food stamps."

Today ABN handles 80 percent of the production of food stamps, with the Bureau providing 20 percent. All coupons, including those printed at the Bureau in Washington, are shipped to receiving points from the ABN distribution center in New York. There orders are received, processed and shipped out through registered mail or armored carrier service. The distribution center sends out an average of \$26,000,000 worth of coupons a day.

In the near future there will be changes in the production of food stamps. The world paper shortage demands another look at the amount of paper the food stamp program generates each day.

Moreover, low coupon denominations are no longer adequate to meet today's program needs. In reassessing the situation, USDA has determined that higher denominations would not only serve food stamp recipients better, but would also reduce the number of pieces of paper needed and, therefore, conserve paper.

What the Department is planning is a series of \$1, \$5 and \$10 coupons which will incorporate security precautions commensurate with the increased value. After the new designs are completed, USDA will conduct a massive educational campaign to spread the word to grocers, recipients and the public in general.

USDA has an excellent record against successful counterfeiting of food stamps. This is due in large part to the group of dedicated people at the Bureau of Engraving and Printing and the American Bank Note Company who conduct the business of safeguarding the manufacturing of food stamps. Keeping fraud to a minimum helps USDA meet the goal of the food stamp program—to feed needy people. ☆



California's Nutrition Education Project Tests Ways to Reach Kids

By Benedicto Montoya

KIDS LIKE THINGS that are sweet (cookies), and things that are sour (dill pickles), and there's never a problem with ice cream, peanut butter or chocolate pudding. They have been known to sample dirt, leaves and flowers, and turn up their noses at corn, carrots, potatoes and peas.

But put a hundred primary students in a school cafeteria, place a hot nutritious lunch in front of them, and depending upon the weather, who is sitting beside them, or a hundred-and-one other variables, they may or may not eat.

What's a school food service director to do?

Some school districts in California set to work on the students' environment, that is, their immediate human environment—their classmates, teachers, and parents as well as the school staff.

In May 1973 these school districts began participating in an 18-month nutrition education project. The purpose of the project was to demonstrate that a statewide nutrition education program, correlated with school food service, could improve the children's eating habits and their attitudes toward food. Some 10,000 kindergarten through third grade students took part in the program.

Funded by USDA's Food and Nutrition Service, the project was conducted by the California Department of Education in cooperation with a selected group of school districts. Project investigator was Violet I. Roefs, a consultant in nutrition education with the State Department of Education.

As part of the nutrition education project in Fullerton, Calif., students made drawings of special foods. They also took part in group activities and played with a "nutrition train."

"Our aim was to involve parents and school personnel in a program of food and nutrition instruction presented by local health and nutrition experts," Ms. Roefs explained.

The project ranged from Northern California to the Mexican border. It involved 43 public and nonpublic schools in 18 school districts, located in eight counties.

More than 250 school staff members (primary teachers, school food service personnel, nurses and school administrators), and 250 parents participated.

In addition, some 240 secondary students and 24 college and university students and dietetic interns became involved in the nutrition education project.

In developing the lesson plans for each of the instructional programs, Ms. Roefs and her co-workers emphasized getting participants to think about why they do things the way they do.

"This approach," Ms. Roefs said, "is called 'Values Clarification.' It's a technique widely used in health and drug education."

A typical lesson was designed to get the participants' attention and to provide them with enough factual information to discuss food and nutrition concepts in small group sessions.

Following the discussion, there was a feedback session involving the entire group. Then the effectiveness of the lesson was evaluated. The teachers were asked to list ways to use the information in the classrooms. Parents were asked to list the effects they expected the sessions to have on food and nutrition practices in their homes and how they might help the classroom teachers with nutrition education.

The instructional model for parents was titled, "Take Your Turn as a Smart Food Shopper." This was a series of five, 2-hour lessons in nutrition and consumer education. The topics covered were: "What Determines How the Food Dollar is Spent?", "Does Billy Really Need Broccoli?", "Why Won't Susie Eat?", "Can You Eat Better for Less?", and "Are School Meals a Good Buy?"

The instructors for the sessions were local experts. They included a dentist, a food editor, and a nationally known author of a book on nutrition, as well as dietitians, home economics instructors, county health coordinators and government representatives.

While a few of the resource personnel were nationally known, most were locally prominent people, concerned about food and nutrition but previously not involved in working with the schools.

"One important part of the project was to mobilize the local experts," Ms. Roefs explained.

The project director praised the parents who participated in the project. "They displayed a good deal of interest. They'll make good missionaries," she said.

She explained that the reactions of different parent groups varied. In some project areas the parents seemed quite knowledgeable about food and nutrition, and were looking for more advanced information. Many wanted to know how they could help in the classroom. In other areas, parents expected more information on how to shop and buy.

The project was designed to span the State's varied economic and social levels. Barbara Swantz, child nutrition consultant with the State Department of Education, worked with a group of parents who were mostly Spanish-speaking. Ms. Swantz did not speak Spanish, but a bilingual parent volunteered to translate. Some printed and visual Spanish language materials from the agricultural extension service also helped.

The instructional model for primary teachers and other school personnel was called, "Format for Nutrition Action." This was a series of ten 2-hour lessons in nutrition, consumer education, and teaching strategies for primary school students. Primary school teachers who successfully completed the course of instruction received two quarter-hours of credit through the extension program of the University of California at Davis. While the classes were made up mostly of primary teachers, the

project allowed for the inclusion of school food service staff, school nurses, and school administrators.

"At one project a school principal became very food and nutrition conscious," Ms. Roefs said. "As a direct result of the project the principal decided to institute family style feeding at his school."

In addition to school staff and parents, the project also involved a limited number of secondary school students. A series of four 50-minute lessons in nutrition and consumer education was presented to the group of 240 students. The purpose was to provide them with information on nutrition and food so they could help teach the other children. During the project, selected secondary student teams went to primary school dining rooms to work with the younger students. For 2 days per week for 4 weeks, they taught by setting a good example.

In the San Ramon School District, according to Arlene Pearson, school food service director, "The secondary students really got turned on to nutrition."

"The district did a plate waste measurement on the secondary students," she explained, "but there was no waste to measure. They certainly set a good example."

Assisting some of the primary school teachers with food and nutrition instruction in the classroom were 24 college and university students and dietetic interns. Ms. Roefs said that the students were well received by the children and the primary teachers were pleased with the lessons they prepared.

The ultimate objective of the nutrition education project was to improve the nutritional habits of the primary school students. To this end, primary school teachers participating in the nutrition education project developed two lesson plans to use in their classes for 3 months last spring. The plans were patterned along the technique of "Values Clarification." Instead of asking the children specific questions, the plans encouraged them to volunteer the information and talk about their attitudes.

The teachers covered three

concepts in the classroom: "Food is needed to make our bodies healthy," "Food brings enjoyment to our lives," and "Food is prepared by many people." From these three concepts, teachers stressed 10 points, ranging from identification of the four food groups to enjoying the meal experience and exploring foods from different lands. In addition, they highlighted five specific foods—dry beans, oranges, broccoli, cornmeal and milk.

How did the nutrition education project affect the eating habits and attitudes of participating children and adults?

In a series of tests to determine participants' eating habits and their knowledge of food and nutrition, the project leaders found significant changes. The tests and questionnaires were given to participants before the project was begun, at the midway point, and upon completion.

"In our preliminary examination of the mass of data collected during the project," Ms. Roefs explained, "there were substantial increases in factual information and changes in attitudes toward food on the part of all participants."

Changes in the attitudes of children showed up in their choices of favorite foods. "At the beginning of the project, the primary students had indicated such things as candy or snow cones as favorite foods," the project leader said. "But the final questionnaire showed a reduction in snack items with little nutritional value."

Adult participants were asked to recall what they had eaten the previous day. In the final questionnaire, they reported eating more nutritious meals and snacks.

A second measure of the project's effectiveness involved plate waste studies, which were conducted in school cafeterias. On "plate waste days" the children were served meals that included the foods stressed by teachers during their classroom sessions—dry beans, oranges, broccoli, cornmeal and milk.

According to Ms. Roefs, data collected during the studies indicated an increase in the consumption of the fruits and vegetables served in the Type A lunch. ☆

Teachers Learn How to Teach Nutrition

By Ronald J. Rhodes

A SCHOOL DISTRICT full of well informed students about nutrition?

The El Dorado, Arkansas, schools and surrounding communities are bordering on this status, as interest in teaching children the importance of eating the right kinds of foods continues to spread.

It started last summer when Bobby Watson, an El Dorado elementary teacher, was selected to attend a nutrition education course at the University of Arkansas. Taught by Ernestine McLeod, nutritionist for the State Department of Education, the course was part of a pilot nutrition project sponsored by USDA and conducted in Arkansas during the 1973-74 school year.

When Ms. Watson returned from the course with enthusiastic reports, school principal Audrey Hampton asked her to discuss it at a faculty meeting. The teacher later spoke at the first Parent-Teacher Association meeting of the year. From then on, interest by the other teachers in the elementary school continued to climb, and nutrition education became a regular part of classroom activities.

Is the nutrition education project working?

"The amount of plate waste has declined since we started the nutrition project," Ms. Hampton pointed out. She described the case of one little girl who lived with her grandmother and would not eat in the school cafeteria. Since the nutrition project has been underway, the child has started eating the school lunch.

The enthusiastic response from El Dorado teachers resulted in a request for an extension course in nutrition from the University of Arkansas—like the one taught by Ernestine McLeod for the nutrition project.

A total of 22 teachers, including some coaches and principals from El Dorado and surrounding areas,

enrolled in the course when it was offered in January. Sadie Booker, a home economics teacher in the El Dorado schools, was the instructor.

"You know, when the course was first discussed, I thought: Why can't students wait until high school where home economics classes include nutrition?" said Ms. Booker. "Now, I can see that the sooner students learn proper eating habits, the better."

The extension course emphasized integrating nutrition with standard school subjects. Teachers frequently included their students in the evening programs, giving demonstrations and presenting questions and answers to the group.

Virginia Break, a fourth grade teacher, included nutrition in many different subject areas last semester. Students made butter and discussed its nutritional value, then served it to the class with rolls and milk. "The nutrition education course was the best course I have ever taken," Ms. Break said. "I have used everything that was discussed in class. The good thing about it was that it provided ways to tie nutrition to regular classroom routine and the basic subjects we teach."

Bill Lawrence, principal of an elementary school in Strong—a few miles from El Dorado—said he can already see results in the application of nutrition education in his school. Lawrence and three of his teachers enrolled in the course.

"Previously we had to extend the physical education period at the school to allow the children a rest period because they were so exhausted from the exercise," he stated. "After we added nutrition education in the classrooms, the children started eating better at school—and apparently at home. Now they have more energy and we can cut out the rest period."

Lawrence admitted with a grin he hadn't expected to get so much value from the course. Now he's a firm supporter of nutrition education and plans to continue the project.

And he said he's sure that Arkansas' nutrition project will have a lasting effect on faculty and students in the El Dorado area. ☆

The Golden Jar: It's more than a place to eat.

By Benedicto Montoya

THE GOLDEN JAR Restaurant in Rowland Heights, California, opened its doors in mid-April, and there hasn't been a vacant seat since. It's the "in" place among the younger set in Rowland Heights, so popular that customers must have reservations to sit at the counter. Those fortunate enough to get a booth or table are willing to share it with strangers.

The Golden Jar is not a fancy restaurant. It's more like a nice, pleasant coffee shop, although coffee is far down the list of favored beverages. The food is nutritious and attractive, but simple. Service is courteous, fast enough, but occasionally not quite professional. And prices are, overall, lower than any other comparable facility in the country. The Golden Jar is open 5 days a week, 1 hour a day.

What the Golden Jar has going for it is location. It is located on the campus of John A. Rowland High School.

Actually, the Golden Jar is a project called, "Innovative Approaches to Secondary School Nutrition." Funded by the Food and Nutrition Service, the project is the inspiration of Ruth Richard, director of food services for the Rowland Unified School District. The main purpose of the project is to make students more aware of the importance of eating nutritious meals. But it also serves as a training ground for students interested in employment in the food service industry.

Rowland High School is one of two high schools in the eastern, less populated portion of Los Angeles County. Prior to the opening of the Golden Jar, participation in the National School Lunch Program at the school was low: out of approximately 2,000 students, only 150 ate the Type A lunch. At the district's other high

school, participation ranged from 500 to 600.

Like many Southern California schools, Rowland High did not have a cafeteria. Students picked up their lunches at serving windows in the kitchen, and ate out-of-doors in a roofed patio area. When the weather was bad, they ate in a nearby multi-purpose room. The restaurant offered a welcomed alternative.

In the months before the Golden Jar opened, the school staff conducted nutrition surveys to help determine what would be served in the new facility. Given by the health and physical education instructors, the

surveys asked about students' likes and dislikes, their reasons for eating and not eating, and their knowledge of nutrition. A similar survey will be given again, after the restaurant has been in operation for a while, to evaluate the effect of the nutrition project on students' eating habits.

The premise behind the project, Ms. Richard explains, is that one way to create interest in nutrition is to involve the students in the food service operation.

"We want to involve as much of the school as possible," she says.

In fact, Rowland High students have been involved in the project



since the early planning stages. Student committees submitted floor plans and ideas for the types of services they wanted to see developed. In addition, the entire student body voted on the decor for the restaurant. Student ideas, along with those of the vocational food service instructor and Ms. Richard, were turned over to an architect and considered in the final design.

Most of the actual construction, which began in November, was done by the school district's maintenance crew. With some help from sub-contractors, they added the restaurant dining area and a dishroom to an

outside wall of the school's kitchen.

Then various vocational and academic classes helped get the operation in working order. For example, the advanced cabinet-making class built cabinets, which the drafting class had designed. Art and graphics students designed the Golden Jar logo, and made placemats, napkins, and menus. The sewing class made uniforms for the vocational food service students, who operate the restaurant for class credit. Students in the photography, electronics, and health and physical education classes also planned projects. Next year business education classes will become involved in the financial end of the operation.

Not only has the project involved a large number of the students and staff at Rowland High, but also members of the community, who serve on various advisory committees. These include a number of the area's most successful professional food service people.

The food service advisory committee, Ms. Richard explains, has been extremely helpful with the vocational training program.

"One restaurant chain that participates on the committee donated tables and china to the Golden Jar. Others have offered to present demonstrations and provide training materials and audiovisual aids.

"Nutrition educators from colleges and dieticians from the local county health department have also readily given their assistance on other committees," she continues.

The restaurant is actually operated by students enrolled in the school's institutional food service course. The course is taught by Love DeMonte. For 3 years Ms. Richard and her food service staff have worked with Ms. DeMonte's class at the district's cen-

tral kitchen. They have helped the students gain experience in working with institutional equipment, and they have taught them mass food preparation techniques, as well as sanitation and handling procedures.

Last spring, there were three institutional food service classes. The largest class, with 35 students, received an orientation to food service and basic food preparation. The other two classes, with 20 students each, spent 2 hours a day getting actual work experience in the restaurant. One class prepared lunch, while the other class served it and cleaned up afterward. In the fall the classes will switch hours so that all may experience the different work situations.

When school reopens, the restaurant will seat about 75 persons. As in the spring, entry will be by reservation only. Menu offerings will be large and varied, and reflect the desires of the student clientel. Hamburgers, shakes, diet plates, soups, and various hot and cold sandwiches will be offered. Also like last year, prices will range from 45 cents to 85 cents per meal. At the lower end of that scale are three of the five Type A meals offered daily at the restaurant. The relatively low price of the Type A meals, according to Ms. Richard, is an inducement for students to choose those selections.

Ms. Richard and her staff are looking into the possibility of offering some of these menu items to students who get their lunches through the kitchen's serving windows.

Because the Golden Jar operated for only 2 months last year, the impact of the restaurant project on the eating habits of Rowland High's students cannot yet be measured. But if involvement is any indication of success, the Golden Jar, as its customers would say, "has got it made." ☆



Customers at the Golden Jar Restaurant (left) enjoy hamburgers, french fries, and milkshakes served by their classmates. The food is prepared by food service students (right), who make salads, hot and cold sandwiches, desserts, and a variety of Type A lunches.

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